



STANFORD UNIVERSITY MEDICAL CENTER

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STANFORD UNIVERSITY SCHOOL OF MEDICINE  
Department of Genetics

Professor Joshua Lederberg

Dr. J. H. Wiggins  
Jr. H. Wiggins Co.  
P. O. Box 192  
Palos Verdes Estates, Calif. 90274

Dear Dr. Wiggins:

I would be grateful to you  
for further information on:

*The use of your paper*

*Did you really compare  
overpressure with static pressure  
in this way? Or is that a  
reporter's misconstruction?*

*Do you have any critical published  
data on this point?*

*Should we have a concerted  
program of periodic sonic stress?  
Have you calculated cost-effectiveness  
ratios?*

Thank you

*Joshua Lederberg*  
Joshua Lederberg

My interest in this material relates  
in part to background for a weekly  
column on "Science and Man" which ap-  
pears weekly in the Washington POST.

E16 Sunday, April 27, 1969 THE WASHINGTON POST

## Mild Sonic Booms Seen Aiding Home

By George Getze

Los Angeles Times

ANAHEIM, Calif.—Mild sonic booms once in a while are good for houses, according to a geophysicist who has made a study of them.

J. H. Wiggins Jr., who was the director of Government-sponsored sonic boom tests at White Sands, N.M., in 1964 and 1965, told a recent meeting of the Institute of Environmental Sciences that repeated sonic booms had actually lowered the rate at which structural defects show up in houses and other buildings.

He said he didn't know why, but that the most plausible theory is that the shaking a house receives in a sonic boom relieves accumulating stress.

Ordinarily, the stress shows up periodically during the lifetime of the house.

"The booms slow down deterioration and aging of houses," Wiggins said.

He emphasized that the kind of sonic booms that apparently have a beneficial effect are "low level" ones of about a pound or so pressure per square foot.

Wiggins has spent five years studying sonic booms and besides being technical director of the White Sands tests, was analyst for the Federal Aviation Administration of the Oklahoma City tests in 1964.

The Oklahoma City booms had an average pressure per square foot of 1.2 pounds, with the strongest boom of 2 pounds pressure. The White Sands tests were stronger.

"The effects of sonic booms have been grossly exaggerated," Wiggins said. "The greatest boom ever recorded

was 120 pounds per square foot—that is, about 120 pounds 'over-pressure.'"

By "over-pressure," Wiggins means the pressure added to that of the atmosphere.

At sea level, people live under a normal pressure of 2116 pounds per square foot. The greatest sonic boom ever recorded added 120 pounds pressure to that, according to Wiggins.

"That's not much and certainly nothing horrendous," he said.

"Even so, you hear stories about sonic booms knocking down buildings, and I've even seen plays on TV in which sonic booms are supposed to have been strong enough to knock down whole cities. Sonic booms could never do anything like that."